

## UNCLASSIFIED

<b>BMDO RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)</b>								DATE <b>February 2000</b>	
BUDGET ACTIVITY <b>5 - Engineering and Manufacturing Development</b>				PE NUMBER AND TITLE <b>0604861C THAAD System - EMD</b>				PROJECT <b>2260</b>	
COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
2260 Theater High Altitude Area Defense (THAAD)	0	79462	549945	685168	789736	755134	591049	TBD	TBD

**A. Mission Description and Budget Item Justification**

The Theater High Altitude Area Defense (THAAD) System is being designed to negate theater ballistic missiles (TBMs) at long ranges and high altitudes. Its long-range intercept capability will make possible the protection of broad areas, dispersed assets, and population centers against TBM attacks. The THAAD System includes missiles, Palletized Loading System (PLS) launchers, Battle Management/Command and Control (BM/C2) units, THAAD Radars, and support equipment. The THAAD Radar provides threat early warning, threat type classification, interceptor fire control, external sensor cueing, and launch and impact point estimates for the THAAD System and other theater systems. The THAAD Radar is based on state-of-the-art, solid-state, X-band radar technology. THAAD will be interoperable with both existing and future air defense systems. This netted and distributed BM/C2 architecture will provide robust protection against the TBM threat spectrum.

The Theater High Altitude Area Defense (THAAD) System Engineering and Manufacturing Development (EMD) phase will refine and mature the Demonstration/Validation (Dem/Val) system design to ensure component and system performance, producibility, and supportability.

The Department of Defense just completed (December 1999) an extensive review of the THAAD and Navy Theater Wide (NTW) programs. The Department focused on an alternative acquisition approach that provides a phased introduction of capability. Prior to this review, the THAAD program was pursuing a standard acquisition approach to field an objective capability, i.e., define requirements, design and fabricate hardware, conduct ground and flight testing and eventually field a capability that meets threshold operational requirements. In order to better balance requirements, pace the threat, and obtain early capability with reduced risk, an evolutionary approach was proposed. This results in a FUE for an initial configuration (termed C1) in fiscal year 2007. C1 will include the capability to defeat all expected upper tier threats in that timeframe, and will meet the key performance parameters outlined in the Operational Requirements Document (ORD). Sophisticated counter measures and battalion operational software is deferred to the next configuration (termed C2) planned for fielding in the 2010/2011- timeframe.

**FY 1999 Accomplishments:**

- Total 0

**FY 2000 Planned Program:**

- Award EMD Contract.
- Conduct Launcher PDR
- 64372 Begin objective system design leading to System PDR & CDR.
- 6690 Initiate material purchases for hardware.
- 8400 Begin software development.
- Total 79462

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<p><b>FY 2001 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 428042 Continue EMD radar, BM/C2, and launcher hardware and software development. readiness. Continue design and development of early EMD missiles. Continue lethality studies and algorithm development. Continue integration of THAAD BM/C2 with PM AMDCCS. Prepare the system integration lab (SIL) for system testing, Conduct BMC2 PDR, Conduct segment CDRs (Launcher, BMC2, Radar).</li> <li>• 106412 Maintain program management/in-house support</li> <li>• 15491 Establish targets, lethality, and OT&amp;E support. Begin preparation for early EMD flights, to include KMR readiness.</li> </ul> <p>Total      549945</p>																																										
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<p><b>D. Acquisition Strategy:</b> The Acquisition Strategy for the THAAD EMD phase has been approved. This will be an evolutionary acquisition approach for the THAAD program. The EMD phase contract (missile, launcher, BM/C2, and Radar) will be a sole source award to the Dem/Val contractor team (as approved September 15, 1995 by USD (A,T&amp;L) utilizing the DoD Acquisition Streamlining approach.) The contractor team for the EMD phase will become the contractor team for the Low Rate Initial Production (LRIP) and Full Rate Production (FRP) phases. A single prime contractor will have total system performance responsibility for the EMD, LRIP, and FRP phases.</p>																																										
<div style="display: flex; justify-content: space-between;"> <span>Project 2260</span> <span>Page 2 of 5 Pages</span> <span>Exhibit R-2 (PE 0604861C)</span> </div>																																										

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E. Schedule Profile	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Milestone II		3Q					
EMD Contract Award		3Q					
EMD MILESTONES:							
Radar CDR			2Q				
Launcher CDR			3Q				
BMC3I CDR			4Q				
System PDR				2Q			
Missile CDR					4Q		
System CDR						1Q	
Configuration 2 PDR						2Q	
EMD Radar 1 I&T Complete						4Q	
Developmental Tests -Begin							2Q
Award 14 Missile Option							3Q

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**BMDO RDT&E COST ANALYSIS (R-3)**

DATE

**February 2000**

BUDGET ACTIVITY

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PROJECT

**5 - Engineering and Manufacturing Development****0604861C THAAD System - EMD****2260**

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. THAAD System EMD	CPAF/IF	LMMS		79462	May 00	428042		TBD	TBD	TBD
Subtotal Product Development:				79462		428042		TBD	TBD	TBD

Remark:

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. SETA	CPAF			0		26732		TBD	TBD	TBD
b. Other Spt Cont	Various			0		26500		TBD	TBD	TBD
c. OGAs	MIPR			0		31460		TBD	TBD	TBD
d. Program Mgmt	Various			0		21720		TBD	TBD	TBD
Subtotal Support Costs:				0		106412		TBD	TBD	TBD

Remark:

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	TBD
a. KMR Range Support	MIPR			0		1100		TBD	TBD	TBD
b. OT&E				0		1324		TBD	TBD	TBD
c. TARGETS				0		2657		TBD	TBD	TBD
d. LETHALITY				0		10410		TBD	TBD	TBD
Subtotal Test and Evaluation:				0		15491		TBD	TBD	TBD

Remark:

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a.										

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Exhibit R-3 (PE 0604861C)

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										DATE
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BUDGET ACTIVITY					PE NUMBER AND TITLE					
5 - Engineering and Manufacturing Development					0604861C THAAD System - EMD					
b.										
c.										
d.										
e.										
f.										
Subtotal Management Services:										
Remark:										
Project Total Cost:				79462		549945		TBD	TBD	TBD
Remark:										